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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/291,316	04/14/1999	HYUN-SEOK LEE	678-258(P871	1934

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EXAMINER

ABELSON, RONALD B

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 04/05/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/291,316

Applicant(s)

LEE ET AL.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-21 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5 and 6 is/are rejected.
- 7) ☒ Claim(s) 3, 4 and 7-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 12.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art 'AAPA', in view of Gray (US 6,473,419).

Regarding claim 1, the AAPA teaches a method for transmitting user data in a mobile communications system having at least one state transition (fig. 1, pg. 4 lines 8-18), at least one state transition including transitioning from an active state where user data is transmitted via a dedicated channel to a control hold state when user data is not generated for a predefined time in the active state (fig. 1 box 140, 130, pg. 4 line 19 - pg. 5 line 3) to transmit only control information via a dedicated control channel (releasing the dedicated traffic channel, pg. 4 line 19 - pg. 5 line 3).

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The system comprises releasing the dedicated control channel and transitioning to a suspended state when the user data to be transmitted is not generated for a second predefined time in the control hold state (thold, fig. 1 box 130, 150, pg. 5 lines 4 - 13).

The system comprises determining a parameter value specifying an attribute of the generated user data and comparing the parameter value with a predefined reference value when the user data to be transmitted is generated in the suspended state (fig. 2 box 153, pg. 7 lines 3-7).

Although AAPA teaches transmitting the user data when the parameter value is lower than the predefined reference value (pg. 7 lines 3-7), the system fails to teach transmitting the user data via a common channel which contains message type information.

Gray teaches transmitting the user data via a common / supplemental channel which contains message type information (fig. 5, element 126, supplemental channel, col. 7 lines 42-60).

Therefore it would have been obvious to one of ordinary skill in the art, having both AAPA and Gray before him/her and with the teachings [a] as shown by AAPA, a method for transmitting user data in a mobile communications system having

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at least one state transition, and [b] as shown by Gray, transmitting the user data via a common / supplemental channel which contains message type information, to be motivated to modify the system of AAPA by transmitting user data over the common channel as opposed to transitioning to the active state to transmit when user data is generated within a predetermined time limit and the mobile is in the virtual traffic substrate. This modification can be performed in software. This would improve the system by saving power since the mobile would not be forced into the active state.

Regarding claim 2, transitioning to an active state to transmit user data via the dedicated control channel when the parameter value is higher than the reference value (AAPA: pg. 5 line 24 - pg. 6 line 5).

Regarding claims 5 and 6, the suspended state is a slotted substrate or virtual traffic substrate (AAPA: fig. 2 box 156, 153).

Allowable Subject Matter

3. Claims 16-21 are allowed.

4. Claims 3-4, and 7-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 3, nothing in the prior art of the record teaches or fairly suggests the length of the parameter value in claim 1 is a length of the user data.

Regarding claim 4, nothing in the prior art of the record teaches or fairly suggests the length of the parameter value in claim 1 is a generation frequency of the user data.

Regarding claims 7 and 8, nothing in the prior art of the record teaches or fairly suggests a burst substrate in combination with the limitations of claim 1.

Regarding claims 9 and 10, nothing in the prior art of the record teaches or fairly suggests the common channel is an

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access or paging channel in combination with the limitations of claim 1.

Regarding claim 16, nothing in the prior art of the record teaches or fairly suggests transitioning to a second suspended state when the user data generated in the first suspended state is shorter in length than a reference value. Note, AAPA teaches transitioning to a second suspended substrate when no data has been generated in the first suspended substrate (spec: g. 7 lines 8-22).

Regarding claim 18, nothing in the prior art of the record teaches or fairly suggests transitioning to a second suspended state when a generation frequency of the user data generated in the first suspended state is lower than a reference value. Note, AAPA teaches transitioning to a second suspended substrate when no data has been generated in the first suspended substrate (spec: g. 7 lines 8-22).

Response to Arguments

5. The examiner acknowledges the applicant's point that the term "dedicated control channel" does not appear at lines 3-4 of

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claim 1. Therefore, the objection to the claim has been removed. However, upon completion of an updated search, the examiner became contends that claim 1 is not allowable over the prior art (see office action above.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronald Abelson
Examiner
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4/1/04



RONALD A. ABELSON
PATENT EXAMINER